FUSED SILICA
HOT PRESS PLATENS
CASTABLE CERAMICS
FIRED SHAPES
AEROSPACE TOOLING

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HI-TEMP INSULATIONS
CALCIUM SILICATE BOARDS
MILLBOARD AND BLANKET
PAPERS AND CEMENTS
CUTTING AND FABRICATING

ULTRA TEMP® 1401 MILLBOARD

CERAMIC FIBER BOARD

PRODUCT DESCRIPTION

ULTRA TEMP 1401 MILLBOARD is a strong, thin, dense board with excellent insulating characteristics. It is made from ceramic fiber, clay, inert fillers and a small amount of organic binders to increase handling strength . It contains no asbestos and can be easily substituted for asbestos bearing millboards. It is smooth and flat and can be used in a variety of environments up to 2300° F (1260° C) . It maintains its integrity through-out a wide temperature range and is easily die cut.

APPLICATION

ULTRA TEMP 1401 MILLBOARD possesses excellent resistance to chemical attack. Exceptions include hydrofluoric acid, phosphoric acid, and strong alkalies.
ULTRA TEMP 1401 MILLBOARD is unaffected by oil or water. Thermal and physical properties are restored after drying should the board become wetted.
ULTRA TEMP 1401 MILLBOARD can also be provided wetted.
ULTRA TEMP 1401 MILLBOARD can also be provided with silicate surfaces to provide added surface strength.

STANDARD SIZES

SHEETS		MACHIED SHAPES	
Thickness	1/32" To 1/2"	Diameter	1/32" To 55"
Area	55" X 55"	Thickness	1/32" To 1/2 "
Other cut sizes & Shapes	Upon request	(may be laminated to any size)	

- Other sheet sizes, thickness and geometric shapes are available upon request- please inquire.
- Contact West Coast Supplier & Fabricator.

ULTRA TEMP® 1401 MILLBOARD

TECHNICAL DATA

APPLICATIONS

- High and low temperature low pressure gaskets
- Personnel protection
- Hot repair
- Duct insulation
- Parting media
- Backup insulation
- Heat and flame shields
- Wood stove thermal barrier
- Low and high temperature dryers
- Expansion joint material

ADVANTAGES

- Easy to die cut
- Low thermal conductivity
- Good compression resistance
- Low heat storage
- Good dielectric strength
- Thermal shock resistance
- Temperature stability
- Excellent dimensional stability

1401 MILLBOARD

Maximum Use Temperature ..... 2300° F (1260° C)

Typical Chemical Analysis

$Si O_2$ ..... 60 %

Al_2O_3 ..... 30 %

Other oxides ..... 2 %

Nominal Density

lbs/ft^3 (kg/m^3) 30-35 (480-560)

Tensile Strength - lbs/in^2 (kg/cm^2)

machine direction 750 (52.7)

cross direction 250 (17.6)

% Compression at 1735 lbs/in^2 (122 kg/cm^2). 20

L.O.I..... 8 %

Dielectric Strength (ave.) ..... 50 volts/mil

THERMAL CONDUCTIVITY

Mean Temperature ° F (° C)	BTU-in/hr/ft^2/° F (w/m° C)
500 (260)	.64 (.09)
800 (427)	.78 (.11)
1300 (704)	1.03 (.15)
1600 (871)	1.31 (.19)

For the purpose of calculating heat loss utilizing computer programs. The following equation can be used to approximate K:

K (BTU-in/hr/ft^2/ ^{0} F) = .59 -2.21e - 5 (T) + 2.917e-7 (T^2); T = ^{0} F